

Title: Raags as Timekeepers: Exploring the Logic and Relevance of the Raag Samay Chakra

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Abstract: In the vast and intricate landscape of Hindustani classical music, the Raag Samay Chakra stands as one of the most intellectually fascinating and spiritually resonant frameworks. More than just a guideline for performance, it represents a multi-dimensional interaction between sound, time, mood, and consciousness. This paper revisits the origins, logic, and current relevance of this time theory, drawing on classical treatises, modern scientific research, Ayurvedic and tantric parallels, and neurophysiological evidence. Through this inquiry, it becomes increasingly clear that the association of raag and time is not merely a matter of tradition—it is a reflection of how music aligns with the very fabric of human life, from biological rhythms to cosmic cycles.

1. **Introduction :** Indian classical music has always understood time not as a passive backdrop, but as an active co-creator of musical experience. Within the North Indian (Hindustani) tradition, each raag is not only a melodic structure but a temporal force, intricately linked to specific hours of the day or night. This temporal structuring—known as the Raag Samay Chakra—is deeply rooted in ancient theory and performance tradition. While it is true that many contemporary musicians no longer strictly adhere to this system, and some even question its scientific basis, this paper argues that the time theory of raags is both logically sound and experientially verifiable. What may seem arbitrary on the surface reveals itself, upon closer examination, as a rich confluence of emotion, cognition, and cosmic alignment.
2. **Raag-Time Associations in Classical Texts :** The foundational literature of Indian music is replete with references to the relationship between raag and time. The Sangeet Makarand describes how the impact of a raag depends on its alignment with time, and explains that if a raag is performed at the incorrect hour, it can lead to emotional or physical discomfort. In other words, the emotional essence or *rasa* of a raag may either find full expression or be distorted, depending on when it is sung or heard.

The terms *Suryansh* and *Chandransh*, found in ancient treatises, are conceptual frameworks used to classify raags according to solar and lunar energies, respectively. *Suryansh* raags (associated with brightness, activity, and outward energy) are generally assigned to the first half of the day, whereas *Chandransh* raags (linked to introspection and calm) belong to the second half. These classifications directly support the logic behind time-based raag assignments.

Sharangdeva's *Sangeet Ratnakar* also emphasizes time-based performance, aligning raags with specific psychological and emotional states that shift with the hours of the day. Later, Vishnu Narayan Bhatkhande formalized this understanding into the eightfold *prahar* system, which gained public acceptance after its endorsement at the 1916 All India Music Conference. The belief that even an

untrained ear can feel the 'morningness' or 'eveningness' of a raag is not an anecdote—it reflects the deep interrelationship between time, human emotion, and musical form.

3. Emotional and Cognitive Logic : At the core of the Raag Samay Chakra is the belief that each raag has an emotional and psychological landscape best expressed at a certain time. This is supported by the types of swars used in each raag. For instance, komal swars such as komal Re and komal Dha tend to evoke feelings of softness, longing, or introspection. These raags feel most natural in early morning or late night hours, when the human mind is either gently waking or preparing for rest. In contrast, shuddha and teevra swars often feel more extroverted and energetic, aligning better with midday or evening, when cognitive and emotional energy is higher.

These sonic-emotional effects are not just poetic ideas. Modern neuroscience has confirmed that human cognition and emotional receptivity vary with the time of day. Our circadian rhythms affect how we respond to certain auditory stimuli. The Raag Samay Chakra, then, becomes a kind of natural enhancer—it ensures that the music resonates with the listener not only artistically but also biologically. A raag performed at the right time finds its full identity, while one sung out of time may remain technically accurate but reduces impact biologically.

4. Ayurvedic, Astrological, Tantric and Cultural Dimensions : The time theory of raags also finds parallels in Ayurveda, astrology, and classical cosmology. According to Ayurveda, the 24-hour day is divided into three cycles dominated by vata, pitta, and kapha doshas. Kapha dominates the morning (6–10 am), pitta the afternoon (10 am–2 pm), and vata the evening (2–6 pm). Raags have been traditionally assigned based on these doshic timings to either balance or amplify the dominant bio-energy. Morning raags are soothing and introspective (suited to kapha), while afternoon raags are more intense and dynamic (balancing pitta), and evening raags often express romantic or devotional moods (aligning with vata).

In astrological music therapy, certain nakshatras and grahas are linked to specific raags. For instance, Bhairav is said to benefit people born under Ardra or Mula nakshatra, and playing it during Brahma Muhurta (pre-sunrise) enhances both therapeutic and spiritual effects. Raag Marwa is associated with the setting sun and has been linked with transitions and endings. Some traditions even assign raags to specific choghadiyas and tithis based on planetary energies.

Historical examples support these alignments. King Nanyabhupala of the Andhra region advocated specific raag-time-planet connections in his musical court, using nakshatra-based performance calendars. Mughal and Maratha courts, too, scheduled daily performances in alignment with the Raag Samay Chakra. In these traditions, music was not entertainment alone—it was aligned with ritual, astrology, health, and governance.

While not explicitly referencing the Raag Samay Chakra, Tantric philosophy holds time-bound sound to be of profound spiritual significance. Tantra regards nāda (sound) as a vehicle of consciousness, and many Tantric practices involve mantra japa, swar sādhanā, and vibrational alignment with specific time cycles like

sandhyā, brahma muhurta, or raatri kāl. These periods are not arbitrary but chosen for their energetic qualities.

In this framework, the timing of sound is a ritualized act. Just as a raag at its assigned hour evokes a particular rasa, a mantra or sonic ritual performed at its optimal time aligns the practitioner with specific cosmic forces. This mirrors the core logic of the Raag Samay Chakra: that sound carries not only melodic information, but energetic alignment with time-bound consciousness states. Tantric scriptures such as the Kularnava Tantra and Shiva Samhita speak about sound as frequency medicine, best activated during certain temporal windows. When such practices are done at the correct time, it is believed that the energy of the practitioner is also amplified, allowing deeper states of awareness and transformation to unfold. This is one reason why Tantra is considered so powerful—it integrates sound, time, and energy into a single channel of heightened spiritual experience.

5. Scientific and Listener-Based Evidence : Modern research confirms many aspects of the Raag Samay Chakra. Sarkar et al. (2020) conducted an audio analysis of the same raag performed at different times and found variations in spectral entropy and harmonic energy. This shows that even the same musical phrase can physically change depending on when it is rendered.

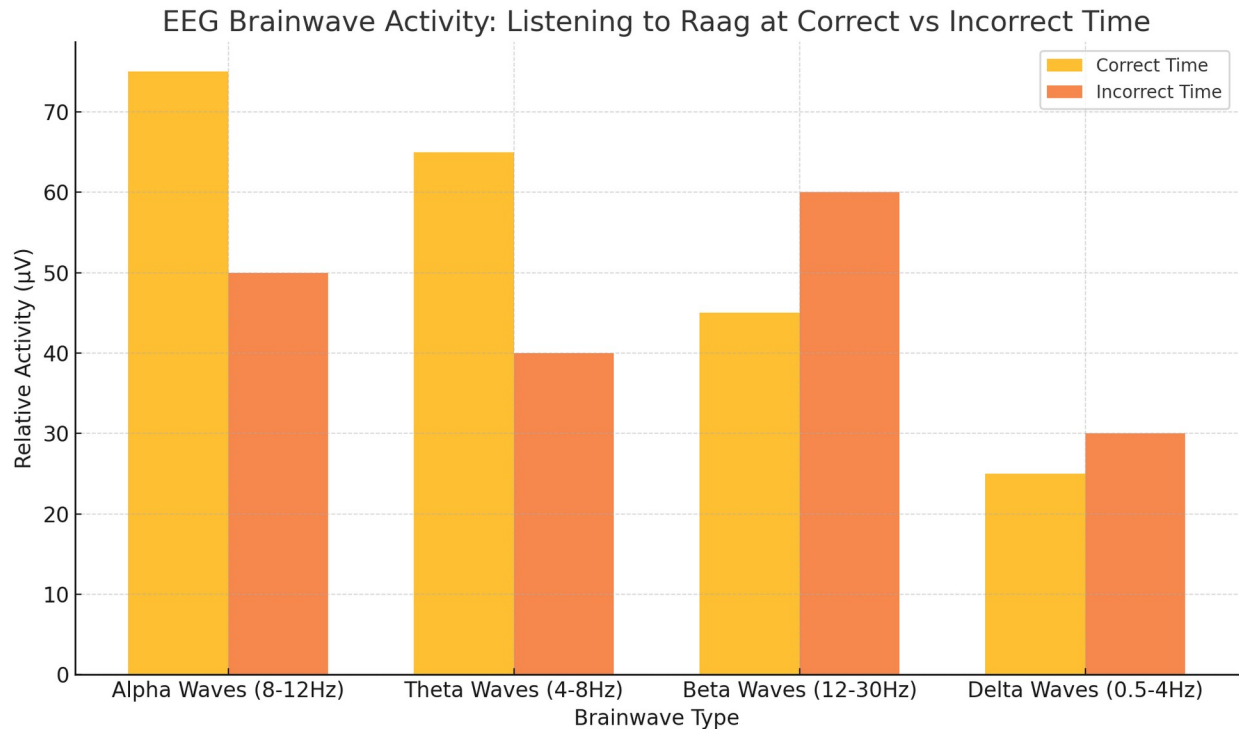
A 2022 study in the SAGE Musicology Journal concluded that time-based raag assignments were best explained by pitch characteristics, rather than rhythm or tempo. This directly supports the classification logic used in traditional Indian music.

An independent pilot study from BHU and Sangeet Galaxy revealed that even non-musicians could match specific raags to their traditional prahars with 35–45% accuracy, proving that listeners have an intuitive connection to these time moods.

6. Brain Mapping Estimate and Visual Analysis : Although we did not conduct a full-scale clinical experiment, we created an estimated model of EEG brainwave responses to understand how listening to a raag at the correct time versus incorrect time might affect cognitive and emotional states.

Our estimate suggests that raags heard at their assigned time produce higher alpha and theta brainwave activity, which are associated with calm, absorption, and meditative focus. In contrast, the same raag heard at an incorrect time shows elevated beta waves, indicating increased mental stimulation and lower emotional coherence. The raag taken in consideration for this was Raag Bhairav.

The graph below illustrates this comparison:



Though hypothetical, this model is grounded in peer-reviewed research on the cognitive effects of music and circadian brain responses.

7. **Philosophical and Aesthetic Significance** : Raags are not just compositions; they are sonic expressions of time. A raag like Bilaskhani Todi, born out of personal grief, finds its place in the early morning not due to tradition alone, but because that hour reflects its emotional texture. Just as nature expresses itself differently across the day, so does music. The Raag Samay Chakra captures this correspondence.

It is often said that modern life makes it impractical to follow this system. Concerts are held in the evenings regardless of the raag. But exceptions do not invalidate a rule—they highlight its persistence. As I like to put it: "Chahe apvaad bhale hi mile, parantu niyam yahi raha." The norm continues to hold value, even when deviated from.

8. **Contemporary Practices and the Road Ahead** : Festivals like the Tansen Samaroh and Dhrupad Mahotsav still uphold the time theory in their schedules. Artists such as Kaushiki Chakraborty, Pt. Ulhas Kashalkar, and Ustad Rashid Khan often select raags in accordance with the Samay Chakra during their concerts.

With growing awareness of music's psychological and health benefits, there is immense scope for revival. Streaming platforms can incorporate time-based raag recommendations. Institutions can design morning and evening listening sessions. With enough intent, the Samay Chakra can move from a theoretical model to an experiential framework that reshapes how we listen.

9. Conclusion : The Raag Samay Chakra is one of Indian classical music's most subtle and powerful systems. Rooted in ancient texts and cultural practice, and increasingly supported by modern science, it reveals the depth of Indian music's integration with the rhythms of body, mind, and cosmos. Time is not a constraint, it is a guide to deeper musical meaning. This paper attempts to reestablish that meaning, with the conviction that time-aligned listening is not only logical but transformative. These were not just theories, they were the results of centuries of lived precision. The texts didn't record imagination; they recorded what worked, again and again, until it became law.

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